

Remarks

Please consider the following remarks in response to the Office action of September 9, 2004. Claims 36-54 remain pending in the present application.

I. Response to Rejection of Claims 36-52(a) Claim 37

Claim 37 is directed to a mechanical fastening system for an article wherein the mechanical fastening system comprises:

a stretchable loop fastener component mountable on the article and comprising a stretch bonded laminate, the stretch bonded laminate comprising an elastomeric substrate and a high bond point nonwoven loop material having greater than 225 bond points per square inch; and

a hook fastener component mountable on the article and adapted for releasable engagement with the loop fastener component;

wherein the stretchable loop fastener component is stretchable relative to the hook fastener component when the fastener components are engaged.

Claim 37 is submitted to patentable over the references of record, and in particular U.S. Patent No. 5,614,281 (Jackson et al.), in that whether considered alone or in combination the references fail to show or suggest a mechanical fastening system for an article wherein the fastening system includes a loop fastener component that is a **stretch bonded laminate** constructed of an elastomeric substrate and a high bond point nonwoven loop material having greater than 225 bond points per square inch secured to the elastomeric substrate.

Claim 37 stands rejected on the basis of Jackson et al. because the Examiner has ignored the requirement for a loop component made of "a stretch bonded laminate." The reason for ignoring the requirement is the Examiner's conclusion that claim 37 is a product by process claim, or more particularly, that "a stretch bonded laminate" is a

process limitation. (Office action of 9/9/04, p. 5). This position is incorrect.

Where the claim term is expected to impart a distinctive structural characteristic, it should be considered a structural limitation even if couched in language that would implicate a particular manufacturing process. *In re Granero*, 162 U.S.P.Q. 221, 223 (CCPA 1979). In *Granero*, the claim was directed to "a composite" having among other things, "expanded perlite particles which are **interbonded one to another by the interfusion between the surfaces of the perlite particles while in a pyroplastic state to form a porous perlite panel.**" *Id.* at 222 (emphasis added). In rejecting the claim, the Patent Office took the position that the bolded language was a process limitation, and that this language was the only thing that distinguished the claim from the prior art.

The court rejected this position stating:

"The trouble with the [Patent Office's] approach is that it necessarily assumes that claim 1 should be construed as a product claim containing a process, rather than structural limitation. However, it seems to us that the recitation of the particles as 'interbonded one to another by the interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held capable of construction as structural rather than process, limitations." *In re Granero*, at 223.

The Court went on to say that the correct approach was to determine whether the prior art showed expanded perlite particles . . . interbonded one to another by interfusion between the surfaces of the perlite particles. *Id.* In other words, the claim was not to be treated as a product by process claim, but rather a product claim including the quoted structural limitation.

The approach mandated by *In re Granero* is the proper approach to the present application. The term "stretch bonded laminate" imparts a structural characteristic and should be treated as a structural not a process limitation. "Stretch bonded laminate" is at least as clearly structural as the terms "interbonded . . . by interfusion", "intermixed," , "ground in place," "press fitted," "etched," and "welded", terms which have previously been found to impart a structural characteristic.

Stretch bonded laminate is discernable from the finished product and without knowledge of the specific process steps used to produce it. Stretch bonded laminate has a gathered upper layer held in place by the resiliency of the elastic substrate. If the laminate is stretch bonded, the loop material is bonded to a stretched elastic substrate with both the loop material and substrate in a relatively flat (non-gathered) configuration. When the substrate is released and contracts, the loop material and the substrate both gather (i.e., have undulating rather than flat surfaces) so that they appear in cross section to have peaks and valley. Because the materials were initially flat, the bonds can be located both in the peaks and in the valleys. This can be observed in the finished material. In contrast, creped material is pre-formed with peaks and valleys prior to (or concurrent with) attachment to the substrate. Therefore, bonding to the substrate (as shown in Jackson et al.) occurs only in the valleys where the loop material makes contact with the substrate. You do not find bonding of the loop material to the substrate at the peaks in the finished laminate, but only in the valleys. Moreover, the substrate tends not to be undulating.

Thus, a "stretch bonded laminate" has clear structural differences from a creped bonded laminate (as shown by Jackson et al.). Moreover, the creped bonded laminate fails to achieve the benefits of using a stretch bonded laminate material. Stretch bonded laminate can stretch much farther (e.g., 300% elongation) than creped

material (e.g., less than 100% elongation). It is physically not possible to crepe material so as to produce large elongation of the creped material.

Accordingly, when all of the requirements of claim 37 are given their proper weight, claim 37 is unanticipated by and patentable over Jackson et al. and the other art of record because they do not show or suggest an article wherein the fastening system includes a loop fastener component that is a **stretch bonded laminate** constructed of an elastomeric substrate and a high bond point nonwoven loop material having greater than 225 bond points per square inch secured to the elastomeric substrate.

Claims 36 and 38-52 depend directly or indirectly from claim 37 and are submitted as patentable for the same reasons as claim 37.

In addition, claim 36 requires that the stretchable loop fastening component can be elastically stretched at least 100 percent in at least one direction. The term "about" has been deleted. Similar to what has been previously argued in Amendment B, Giacobbe, U.S. Pat. No. 5,453,318 does not disclose a loop fastening component that can be elongated by **at least 100 percent**. Applicants strongly disagree with the Examiner's interpretation of "about 100 percent" to include within its scope 75 percent, as disclosed by Giacobbe. Such an interpretation is more than merely recognizing that "about" means that the exact number is not claimed, but so as to render it meaningless. However in order to expedite prosecution, applicants have deleted the term. Giacobbe fails to show or suggest a loop component that can be elongated at least 100 percent of its length. Even without the qualifier "about" the claim term should be literally read to encompass insubstantial variations from the exact number. For these additional reasons, claim 36 is submitted to be patentable over the references of record.

Still further, claims 47 and 48 include the requirements (respectively) that the loop material is "mechanically restrained",

or is "neck-stretched". These are structural, not process limitations and should be given according weight for the essentially the same reasons as "stretch bonded laminate" as argued above for claim 37. Jackson et al. fail to show or suggest a loop component having the foregoing construction.

II. Response to Rejection of Claims 53 and 54

Claims 53, 54 and the specification do not inject new matter, and do clearly point out and distinctly claim the invention.

(a) Claim 53 and Specification

As to claim 53, the claim requirement for "non-creped" loop material is supported by the specification. It is noted that literal support is not a requirement. MPEP §2173.05(i). The claim does affirmatively describe what is being claimed, that is, a loop component comprising an elastomeric substrate and high bond point loop material secured to the substrate. The universe of possible conditions under which the loop material could be so attached is not infinite, but limited and well understood by those of ordinary skill in the art without verbatim disclosure in the specification. The claim merely excludes "creped" from this finite universe.

The use of a negative limitation within a claim that affirmatively specifies the constitution of the thing claimed is proper. *In re Bankowski*, 138 U.S.P.Q. 75, 79 (CCPA 1963). In *Bankowski*, the claim called for a "tissue culture medium devoid of avian tissue". The tissue culture was otherwise defined by the claim so that it was definite. The negative limitation excluded one possible composition, but did not prevent the artisan of ordinary skill from making and using the invention. The situation is the same in the present application. The claim specifies that you have loop material secured to an elastomeric substrate with a certain bond point density. The person of ordinary skill clearly has enough information to make and use the loop component. The further description in the claim that the loop material is not creped does not inhibit the person of ordinary skill from securing loop material

to an elastomeric substrate in a suitable manner.

Therefore, claim 53 and the specification both satisfy 35 U.S.C. §112.

(b) Claim 54 and Specification

The claim requirement for non-woven loop material substantially free from discrete compression points other than at said bond points is supported by the specification. Again, the claim tells the person of ordinary skill how to make the claimed invention. A high bond point non-woven loop material is secured to an elastomeric substrate and has a bond point density of more than 225 bond points per square inch. This provides a very clear and definite description of the claimed invention. The negative requirement that the loop material be free of discrete compression points except at the bond points. As stated above, verbatim support in the specification is not the standard. This question must be judged from the vantage of someone of ordinary skill in the art. The prior art explains what compression points are, and this knowledge is imputed to the person of ordinary skill. As explained by Jackson et al. they are higher fiber density "due to compression or compaction of the fibers of the nonwoven layer in the non-raised areas". (Jackson et al., col. 9, lines 8-24). One readily understands that bond points are areas in which fibers are necessarily compressed by the act of bonding. The specification of the present application clearly describes bond **points**. Points are discrete areas, so the person of ordinary skill understands the meaning of the term "discrete compression points" from the specification. Jackson et al. also teach that creping produces areas of fiber compression that are not caused by bonding. (*Id.*). Thus, the person of ordinary skill (having knowledge of the prior art) understands that the loop material is secured to the elastomeric substrate in such a way as to avoid compression points like those created by creping that are not associated with bonding. By limiting these compression points the functionality of the loop

material to capture the hook material and remain securely fastened is improved.

Accordingly, claim 54 does clearly point out and distinctly claim applicants' invention and therefore satisfies 35 U.S.C. §112. Moreover, the specification of the present application supports claim 54.

CONCLUSION

In view of the foregoing, favorable consideration and allowance of claims 36-54 is respectively requested.

Respectfully submitted,



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*Enclosures

CERTIFICATE OF MAILING

I certify that this Amendment C in the application of Mathew L. Koele, et al., Serial No. 10/038,675, filed December 31, 2001 is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this 7th day of December, 2004.


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